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DATE MAILED: 10/18/2004

APPLICATION NO), F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,618		10/14/2003	Anthony J. Van Zeeland	Dura 118	1831
29607	7590	10/18/2004		EXAMINER	
DURASV	VITCH			DONOVAN,	LINCOLN D
234 S. EX SEC. 103	TENSION			ART UNIT	PAPER NUMBER
MESA, A	Z 85210			2832	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/683,618	VAN ZEELAND ET	VAN ZEELAND ET AL.				
Office Action Summary	Examiner	Art Unit					
	Lincoln Donovan	2832	مهم				
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet w	ith the correspondence ad	dress				
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 (after SIX (6) MONTHS from the mailing date of this communicat - If the period for reply specified above is less than thirty (30) days - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	CION. CFR 1.136(a). In no event, however, may a ion. s, a reply within the statutory minimum of thir period will apply and will expire SIX (6) MON a statute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely NTHS from the mailing date of this co BANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	<u>26 July 2004</u> .						
2a) ☐ This action is FINAL . 2b) ∑	This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ⊠ Claim(s) <u>1-20</u> is/are pending in the applic 4a) Of the above claim(s) <u>9-20</u> is/are with 5) ☐ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-4 and 6-8</u> is/are rejected. 7) ⊠ Claim(s) <u>5</u> is/are objected to. 8) ☐ Claim(s) are subject to restriction	drawn from consideration.						
Application Papers							
9) ☐ The specification is objected to by the Exa	aminer.						
10)☐ The drawing(s) filed on is/are: a)☐	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection	to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the call 11) The oath or declaration is objected to by the call to be seen as the call the	•	• •	• •				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. Iments have been received in A e priority documents have been Bureau (PCT Rule 17.2(a)).	application No received in this National	Stage				
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-943) Information Disclosure Statement(s) (PTO-1449 or PTO/5 Paper No(s)/Mail Date	18) Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO 	9-152)				

Art Unit: 2832

DETAILED ACTION

Election/Restrictions

Claims 9-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claimed invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07-26-04.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 4-5, it is not clear what structure is intended by the flexible layer "characterized by at least one flexible armature."

Regarding claim 8, line 3, it is not clear what limitation is intended by "properly positioned."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reisem [US 4,513,271] in view of Kobayashi [US 5,243,162].

Regarding claims 1-2 and 8, Reisem discloses an electrical switch [10] comprising:

- a magnetic coupler layer [14], with a top and bottom surface, having at least one opening [14, 16];
- a magnetic flexible layer [18], with a top and bottom surface, having a flexible armature portion [figure 4] arranged such that there is a magnetic attractive force between the magnetic coupler layer and the at least one flexible armature such that the bottom surface of the magnetic coupler layer is normally magnetically coupled to the at least one armature portion;
- at least one actuation member [20] formed on and extending from the at least one armature portion;
 - a bottom layer [42, 48] aligned with the coupling layer; and
- electrical conductors [24, 26, 34, 36] capable of switching between an electrically opened and an electrically closed position when the switch user manipulates the at least one flexible armature.

Reisem disclose everything claimed except a spacer being formed on the magnetic layer so that the bottom surface of the magnetic flexible layer is substantially supported about the bottom layer to create at least one armature cavity for the at least one flexible armature portion.

Kobayashi discloses a membrane switch [figure 1] having first and second switching layers separated by a spacer means [5].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a spacer on the armature portion of Reisem, as suggested by Kobayashi, in order to provide switch contact separation.

Regarding claim 3, Reisem, as modified, disclose everything claimed except markings being provided on the actuator portion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include markings of the switch actuator in order to provide an indication of the switch function.

Regarding claims 4 and 6, Reisem, as modified, disclose everything claimed except the particular bias state of the switch.

The particular bias state of the switch would have been an obvious design consideration based on the desired default function of the switch.

Regarding claim 7, Reisem, as modified, disclose everything claimed except the switch being a membrane type switch.

Kobayashi discloses the use of switch contacts in a membrane type switch.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the membrane design of Kobayashi for the switch of Reisem, as modified, for the purpose of reducing the size of the switch.

Allowable Subject Matter

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Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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